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## Using Twitter to Increase L2 Interaction

Findings from a High-Functioning Japanese  
University ESL Class

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# Using Twitter to Increase L2 Interaction: Findings from a High-Functioning Japanese University ESL Class

Theodore Bonnah,<sup>1</sup> Kobe International University, Japan

*Abstract: In recent years, Twitter has commanded research attention in domains from digital sociology to language pedagogy. This paper explores how daily tweeting allows Japanese university students at the intermediate end of English as a Second Language (ESL) studies to exercise and improve their interactive competencies. The aim was threefold: first, to increase both production and exposure, leading to improved definition of the identity of the L2 user self. Second, to extend learning beyond the classroom and class times, creating a technologically enhanced transformative pedagogy that transferred power to the learner. Lastly, to promote the interactive capability of students through interactions between students, with the teacher, and extending to the global Twitter community for social justice pedagogy. The author uses Discourse Analysis (DA) to contextualize both the methods and findings, and offers suggestions for using Social Network Analysis (SNA) to uncover the interactive gains of using Twitter in this way.*

*Keywords: Twitter, ESL, Discourses, Practice, Technologies*

## Introduction

Since its appearance in 2006, Twitter has become a dominating presence in society. Its blend of concise communication and networking ability have made it useful to people of all social strata—average people, celebrities, and heads of state. In recent years, Twitter has commanded research attention in domains from digital sociology to language pedagogy, with Mork (2009) introducing its use for English as a Second Language (ESL) pedagogy in Japan. This paper explores how daily tweeting allows Japanese university students at the intermediate end of ESL studies to exercise and improve their interactive competencies. The aim was threefold: first, to increase both production and exposure, leading to improved definition of the identity of the L2 user self. Second, to extend learning beyond the classroom and class times, creating a technologically enhanced transformative pedagogy that transferred power to the learner. Lastly, to promote the interactive capability of students through interactions between students, with the teacher, and extending to the global Twitter community beyond for social justice pedagogy. The author uses Discourse Analysis (DA) to contextualize both the methods and findings, and offers suggestions for using Social Network Analysis (SNA) to uncover the interactive gains of using Twitter in this way.

The current line of inquiry that lead to this research was informed by previous action research with low level (maximum TOEIC score 300) Japanese university undergraduate students of ESL, aged eighteen to twenty (Bonnah and Donnellan 2017). The setting was a private university with a low ranking among Japanese domestic higher education institutions, and classes were required for graduation. Students were both unfamiliar with English and generally unmotivated to use it or improve it. To counteract this, these students were instructed to tweet daily in English as a form of extensive English writing, with no judgment passed regarding spelling or grammar. In this preliminary study of Twitter use among low-level English L2 users, the authors emphasized production and analyzed discourses such as L2 speaker identity, Japanese

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cultural identity, and evidence of digital literacy visible in student Tweets. The question of learning, however, was left aside.

Conversely, the current paper examines the practice with higher level (minimum TOEIC score 600) undergraduate English L2 students in a different Japanese university, with a focus on interaction. The current data comes from spring 2017, and was gathered in the second half of a year-long Intensive English class with fifty<sup>2</sup> high-intermediate level<sup>3</sup> users in a class at Kwansei Gakuin University. The class had an English only policy and was centered on the four base language skills (speaking, listening, reading, writing). The author decided to focus on speaking and listening in the first semester (September 2016 to January 2017), and reading and writing in the second semester (April to July 2017), when Twitter was implemented. I note that three students opted out of data collection, although whether this was for personal reasons or due to technical problems is uncertain.

In the conclusion to the previous publication, the authors identified the need to focus more on interaction, and so this study was conceived. As Bonnah and Donnellan (2017, 3674) asked,

Are students using English in a way that is socially useful? Are they writing mostly about themselves, indirectly about others, or directly to others? (i.e., personal pronoun use) Are their utterances straightforward, with direct denotative speech, or do they use connotations or idioms with social characteristics? (i.e., declarative vs other functions). Do they interact with each other, ‘pile on’ to a subject, or are they still micro-blogging with little interaction? Answering these and other questions will not be easy.

The authors also recognized the need to analyze data concerning interaction more quantitatively, and have striven to do so in this paper. This paper thus uses mixed methods, balancing quantitative to qualitative approaches, to unpack what was happening in class. Both analyses are referenced to life histories, namely the knowledges of student ability and disposition acquired by the instructor over a year of class together. The question the author seeks to answer is thus—how did Twitter encourage interaction, and what kinds of interactions did Twitter promote?

To answer this question, the author looks at the basic statistical data of student tweets in the initial quantitative part of the analysis. First, he examines basic corpus size, rates of interaction, taxonomy of reactions to starting Twitter as expressed by students, increase in teacher analytics (i.e. profile visits, Tweet impressions, and mentions), homework completion rates, and correspondence of Tweets, interactions, and word counts. He ends this section with a network graph created from the record of interactions in class A. For the qualitative section, sample interactions are examined in detail for discourses, which are defined as the three central functions of language identified by Wetherall (2005)—namely for expressing identity, aiding interaction, or maintaining power relations. First, a sample interaction between low-level learners is analyzed, followed by an analysis of a sample of high-level learners. Finally, an example of Twitter use for social justice pedagogy is looked at. Although this approach may seem somewhat busy, as Zappavigna (2012, x) notes, data gathered from Web 2.0 is “more than words,” and so will require new methods such as data visualizations and social semiotics to make sense of it.

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<sup>2</sup> Twenty-three students in class A and twenty-seven students in class B, respectively.

<sup>3</sup> Average of 600+ on TOEIC.

## Background

### *The Promise of Twitter*

The usefulness of Twitter in English as a Second Language (ESL) classrooms has already been noted. In her examination of Chinese ESL students, Borau et al. (2009, 79) summarize the general benefits:

Twitter seems to be a perfect tool to support learning English, especially in blended classrooms, for the following reasons. First, Twitter is easily accessible [sic] from almost everywhere, so the students can practice at any time by sending and receiving messages either on the computer or the mobile phone. They can also decide how much time they spend reading and writing these messages. This is an essential feature for busy students. Second, Twitter is suitable for any level of English because in writing the messages, the students can choose a topic and grammatical structure fitting their level. Third, the use of Twitter as an online learning community can help to integrate students in the community who could not attend classroom.

In his comprehensive review of SNS use in EFL/ESL contexts, Alnujaidi (2017) gives a litany of benefits of Twitter use for language learning, ranging from classroom management, to skill training, and interactive competence. He writes,

Twitter could also create a classroom community, promote collaborative writing, foster editing skills, develop literacy skills, provide reader response, offer students opportunities to discuss issues in formal and informal settings, provide collaboration across schools and countries, enhance group-project management, assess opinion and examine consensus, foster interaction about a given topic, and enhance metacognition...[S]tudents and faculty [are] able to engage in sharing, collaboration, brainstorming, problem solving, and creating moment-to-moment experiences...Additionally, Twitter could develop students' fluency in written (writing and reading) and oral (speaking and listening) skills, allow them to focus on what they want to say better within 140 characters, lead them to more interactive and quick discussions, and enhance their metacognition. It allows teachers to send reminders to students about assignments, tests, etc. It changes classroom dynamics. It encourages collaboration and feedback. Teachers can post a link or a question for students to respond to together using Twitter's system of responding to a single person. It encourages concise writing and focuses the attention with its 140 characters. Teachers can use Twitter to force students to be concise and to get right to the point. It keeps track of a conversation students carry on a particular topic. (2017, 38–39)

As we shall see, many of these positive effects were borne out in the current study.

There are other reasons why an ESL educator in Japan, like myself, would turn to Twitter. First, it has popularity in Japan. As Bonnah and Donnellan (2017) note, Japan received its own language interface two years after Twitter's creation, and among the students of this study, around 95 percent were already using the platform. My students would prefer to do everything on their cellphones, yet the university infrastructure is outdated and geared for computers, so programs like E-Central or X Reading lose some functionality on mobile devices. I turned to Twitter because students could use their phones exclusively, which is far more

interesting/motivating than most Computer-Assisted Language Learning (CALL) programs. This experience has convinced me that we educators have to think of student “cultural context” or circumstances more, especially as technology decentralizes the classroom. Social Network Services (SNS) like Twitter, LINE in Japan, and WeChat in China are becoming the dominant mode of communication of many cultures. Using them in the classroom promotes not only L2 interaction, but global multimedia literacy. English is not just in books anymore—it is in use and evolving on the internet, and applications like Twitter and Facebook are the loci for its development, for good or ill.

Twitter currently has 45,000,000 users in Japan as of October 2017, with 62.4 percent of users in their twenties (Social Media Lab 2018). Twitter offers a greater ease of use compared to the Japanese homegrown SNS called LINE, which follows conversations and not accounts of individual users. In terms of second language practice, Twitter allows editing before and after posting, and by having Follow, Reply, and Tweet buttons, already comes with default interactive functions. As Bonnah and Donnellan (2017, 3674) remark, “since the goal of language instruction is to make social practitioners, the inherently social nature of Twitter, ease of implementation, and its lack of intimidation make it a resource for implementing regular English practice.”

Moreover, from a pedagogic standpoint, Twitter also serves several functions in a classroom. Based on experience from Bonnah and Donnellan (2017) to the present, the author identifies five pedagogic uses of Twitter:

1. Learning Management (as suggested by Mork 2009)
2. Routine language production (extensive writing)
3. Nonjudgmental space for production and interaction
4. Social justice education
5. Research data collection

First, Twitter serves as a Learning Management System (LMS). Although Kwansei Gakuin University has its own LMS based on Blackboard, it is byzantine and relatively unused by students, who prefer largely to do assignments with their cellphones and other portable devices. Yet the digital infrastructure of the university is largely geared towards computers and not mobile devices, as the author has experienced while using CALL programs such as E-Central and X-Reader. This meant that students would lose some functionality trying to use CALL applications on their mobiles, a demerit that negatively impacted student motivation and assignment completion rates. With Twitter, mobile functionality is maximized, and so assigned homework, reminders, and other communications were all instantaneously seen by the entire class.

Second, as Bonnah and Donnellan (2017) have shown, having low-level users engage in daily writing via Twitter has its benefits in terms of exposure and motivation. As we shall see, the same is true of high-level users, but in different ways. In this new study, we look not only at production, but interaction as well. Related to this is the third function of Twitter, to act as a nonjudgmental space where students can take risks. Because of this, low-level students can practice English production, while high-level students can experience different types of interaction, as we shall see in the Conversation Analysis (CA) examples in the Findings section below.

Fourth, Twitter can also be used for social justice pedagogy in various ways. My students were unfamiliar with world events or global issues, having gone through the Japanese education system, which puts Japanese history above world history. This trend effectively made them noncommittal about current events, but with Twitter they could connect directly to organizations involved in social action, as well as media that cover it to inform themselves on issues discussed. Also, the nonjudgmental nature of weekly tweeting allows them to express their reactions to, or

opinions on, socially relevant lessons online in a way that might not be as constrained as in verbal interaction, where they might be more wary of an adverse reaction. This type of positive student response and increased self-expression was especially striking in Japan, where as Doyon (2000) notes, students are generally reluctant to speak.

Fifth and last, as Bonnah and Donnellan (2017) note, tweets correspond to speech acts or turns, and thus are ideal for language science research, whether it be CA, corpus linguistics, Discourse Analysis (DA), or some other approach. Besides convenience for analysis, the nature of tweets also allows analysis to focus specifically on interaction. Wong and Waring (2010, 9) note that “Without turns, there is no social interaction...Knowing how to participate in turn-taking is the single most elemental ‘driving force’ in learning how to ‘do’ conversation. It is the axle in the wheel of social interaction, the main supporting shaft that undergirds interactional competence.” Analyzing tweets is thus a way of getting at the interaction which is the heart of the social practice we call language.

### ***Discussion: Technological Issues for Educators***

Warschauer (2009, xx) asserts that technology should be regarded as “not a magic bullet to solve educational problems, but rather as a powerful tool that can have both positive and negative impact, and that must be carefully exploited.” Despite the abovementioned promise of using Twitter in the ESL classroom, like any technology, there are several issues with its use. One constant that has not changed since my initial teaching research about Twitter is the technological hurdle facing teachers. In addition to the daunting yet manageable initial need to learn how to use Twitter itself, researching Twitter and making insights to improve teaching presents another, even more challenging technological hurdle for educators. According to Bonnah and Donnellan (2017, 3674),

...socio-linguistic analysis of tweets for discourse beyond the word or phrasal levels cannot be easily automated, and so new tools and techniques need to be developed. This means that mixed-methods analysis of Twitter and other SNS data remains largely a creative exercise...Also, educators have limited time and knowledge of high-end Twitter analytic software and techniques. Until corpus linguistics becomes automated to the point of universal access, this type of mixed-methods research promises to unlock the potential of Twitter for language education.

This observation still stands, and the perceived need for tech skills (Twitter, Python, Antconc) are still hallmarks of the growing field of digital humanities, of which Twitter analysis has become a major concern.

To address this technological challenge, the author has adopted the following research approach. First, I strongly feel that action research should not inflict an additional burden of specialist knowledge, such as technical knowledge or programming skills, on the teacher-researcher. This is an unpopular assertion in the field of Second Language Acquisition. For example, Wong and Waring (2010) assert that teachers need to learn the whole Conversation Analysis (CA) framework to analyze conversations generated in their classes, an assumption that is both unrealistic and counterproductive. Busy teachers have their hands full teaching, and the benefits of learning the voluminous and contradictory thirty-five years of accumulated CA theory and practice are dubious at best.

This principle holds equally true for Twitter analysis, which is driven by social scientists mining for data that often does not impact language teaching. I have thus chosen to avoid specialist programs such as Python or Antconc, which are more suited to digital sociology research on networks. For example, the program Antconc, which was developed for linguistic corpus analysis by Lawrence Anthony at Waseda University in Tokyo, does sentiment analysis,

concordance, collocates, N-grams, and allows download of a corpus of tweets as text files. All this is hardly necessary for evaluating if Twitter promotes production or interaction. Downloaded text files are also unwieldy with a class corpus, and may require add-ons or time-consuming coding to be useful. Similarly, Python can be used for high-end corpus analysis and data mining, but requires equally high-end programming skills and possibly add-on programs. It must be noted that social network analysts use some streaming service (e.g. Firehose) plus analytic add-ons because they want a random corpus from tweets worldwide, while the educator, like myself, is conversely interested in the tweets of his/her class. If a teacher feels both up to this challenge and that the findings would be worth the effort of mastering Antconc or Python, I salute him or her, but I do not believe it is a prerequisite for doing Second Language Acquisition (SLA) research about interaction on Twitter.

Conversely, I believe that for action research needs, there exist ample alternative tools for making substantive findings that can measure the effect of daily tweeting on learning, and lead to improvements to teaching. Consequently, for this research I have thus limited myself to simple programs, both for data collection and analysis, all low-end tools that any educator should have already become familiar with, or could conceivably do so, and their use make my research replicable by any teacher. Where previously Twitter's licensing did not allow direct download of text, instead requiring that tweets be downloaded through its API as data and coded or converted to text (Burghardt 2015), with the advent of the application All My Tweets, teachers can download their students' and their own tweets in PDF form for analysis. For downloading tweets, All My Tweets only requires that one sign up, type in a Twitter account name, and the application generates PDFs of either all Twitter actions (tweets, replies, retweets) or just tweets as selected. Although there is some time-consuming spreadsheet data entry required, this pales in comparison to the time needed to master and input data in Antconc or Python, in my opinion. Once the data is downloaded, I find that Word, Excel, and Google docs are robust enough for sociolinguistic analysis and available to most educators. I use Word to do word counts and find terms, Excel to correlate data, and Google docs to store my data and make data visualizations online. I had also thought of using Textalyser, a free linguistic analysis page at [textalyser.net](http://textalyser.net), but realized it was not necessary due to my focus on interaction. Nevertheless, other researchers might find that for performing basic statistical analysis (e.g. lexical density, frequency, word count, etc.) Textalyser can be useful to them when applied to Twitter or other textual data.

Finally, there are ethical and privacy issues with the use of Twitter for education. Twitter is unabashedly a business, and when users sign up they also sign away their rights to the content they produce. By explaining these issues to students and gaining their consent, while protecting their privacy, teachers can have students interact on Twitter and analyze the data they generate without any ethical or privacy problems.

## **Teaching Methodology and Evaluation**

### ***My Pedagogic Beliefs and Approach***

Although using technology is often thought as a panacea that will automatically improve learning, for successful implementation of a new technology, the educator must first conceive a philosophy or guiding set of principles, followed by a detailed methodology for use based on this. My philosophy or guiding principles were as follows:



1. Language is a social practice, and thus an interactive focus is essential. This is especially true online, as Barton and Potts (2013) argue.
2. Using English should be a life practice, and daily tweeting cements this practice.
3. Language students need a place to take risks, for as McCarty (2013) notes, their self-esteem can easily be shaken by communication failures. I am thus not interested in errors,<sup>4</sup> and my focus is interaction, not only production.
4. Teaching how to write and read Twitter-style English improves multimodal literacy, which Heberle (2010) argues is essential for modern language pedagogy. This New Media English featuring hastags, emoji, gifs, and embedded video is invaluable for students' future interaction in English, both in personal and professional contexts.
5. Daily tweeting and interaction is a paired speaker task on a grand scale. It promotes what Wong and Waring (2010) call interactive competence, as well as writing English as a daily life practice. Learning continues after class ends, and the author is still in contact with students from the study group on Twitter at the time of writing.

These five guidelines were explained to students, so that they would understand the meaning behind Twitter use, and not simply dismiss it as another attempt at making a “fun” class by the meaningless implementation of technology or extracurricular activity.

Once this philosophy was in place, it became the base for my methodology for using Twitter, which was also explained to students. The five tenets are as follows:

1. Students must post in English, five days a week for ten weeks. Tweeting would only be accepted if it were done outside of class time, unless a special assignment was given, at which times students could tweet during class.
2. A post could be a Tweet, a reply, or a retweet. Students should add some sort of media (i.e. video or picture) at least once a week.
3. Posts are not judged for spelling or grammar, but instead for intelligibility.
4. Once a week the instructor will give a special Twitter assignment to be done in class.<sup>5</sup>
5. After introducing the basics of Twitter, it is up to the students not only to find subjects that will keep their own and readers' interest up for the whole semester.<sup>6</sup>

One criticism that could be raised is about weight of the Twitter assignment, which counted for 20 percent of the final mark. Whereas in the previous study the Twitter assignment was

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<sup>4</sup> Students need perfect spelling and grammar in the traditional writing assignment of their class, but the Twitter portion only requires comprehensible phrases. Even national leaders write “ungrammatical” tweets such as “Covfefe.”

<sup>5</sup> Weekly assignments included such activities such as using a hashtag, following a Twitter account related to their interests, or commenting on another student's post (e.g. in response to another student's post about the topic My dream job Finally, students choose their favorite image from a gallery walk then tweeted a photo they took of it and made a comment explaining their choice. These assignments were designed with increasing complexity as per Bloom's Taxonomy.

<sup>6</sup> The instructor used marketing and fun videos to introduce concepts, such as what to tweet about and how to grow followers, and how to use humor in tweets.

weighted at 10 percent (Bonnah and Donnellan 2017), upon consultation with students in this study, it was decided that 10 percent was small and thus demotivating considering the amount of writing done. This was also balanced out by another writing assignment of a traditional research paper in the class, also weighted at 20 percent. The author considers this a fair distribution of marks, and the motivation and results would tend to justify this.

## Findings

Due to the focus on interaction of this study, the findings of this research go against the grain of most ESL research into Twitter use, which either attempt to taxonomize tweets, determine student attitude toward it, or suggest ways technology should be used. McCarty et al. (2013) look at the content of tweets, as well as how they were used, as either diaries or communication, while Melor et al. (2012) gauge the attitudes of ESL writers towards using SNS in class. Finally, Mork (2009) looks at Twitter methodology and issues with use. Consequently, the method of data collection and analysis for this paper is very different from other research. Whereas McCarty et al. (2013) and Borau et al. (2009) use questionnaires, this research uses raw tweets as the object of the qualitative discourse analysis and the numbers and participants of replies as quantitative evidence of interaction. Although this approach is eclectic, the result of making the types and topography of interactions visible was worth the risk of using unconventional research methods.

## General Impressions

The tweeting of students created a sizeable corpus for research. The total was 7,934 tweets, for an average of 161 tweets per student (minimum forty-seven and maximum 617). Word count stood at 60,528 words, with an average of 1,315 per student (minimum 469–maximum 4,069)<sup>7</sup>. There were 2,774 interactions<sup>8</sup>, with an average of sixty per student (minimum nine and maximum 160). In terms of both production and interaction, then, Twitter promoted serious work by students. I turn to different ways to look at this corpus, at its general positive features, before proceeding to the quantitative significance and qualitative aspects of interactions.

Overall, several positive effects of daily Twitter posting became apparent over the semester. First, increased intrinsic motivation toward using Twitter was visible in student reactions at the start of implementing daily tweeting. Although technology in the classroom is often thought of by teachers as a way to make classes interesting for young people, from my experience with several CALL programs (listening labs, Dyned, E-Central, and X-Reading), it all too often devolves into drudgery and busywork. In my two Intensive English classes, many students expressed impatience to start Twitter, or felt the need to convey to others their starting. The Twitter-referencing comments are listed in Figure 1 below:

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<sup>7</sup> NB: Word count is approximate (includes dates and URLs)

<sup>8</sup> NB: Interaction could be a like, reply, or repost with comment

A1: I'd like to be friends with anybody! So please don't mind to follow me!! Apr 11, 2017
A3: Is it ok like this? Maybe... Apr 13, 2017
A5: Today is first day. I'll beginning. Apr 09, 2017
A6: I made my twitter account to improve English writing skill,so I'll only use English when I write Apr 08, 2017
A15: This is my first tweet ! I'll go shopping at Nishinomiya Gardens. But I'll go home early because it is cold today. Apr 10, 2017
A16: Finally,I can start IE account! It takes 2days to fix a bug of my new account Apr 13, 2017
B3: I can't tweet because of number of letters being limited.so today I just upload the picture . <a href="https://t.co/2NvQ1aBERI">https://t.co/2NvQ1aBERI</a> Apr 11, 2017
B6: I CAN NOT CHANGE MY Twitter PROFILE BECAUSE OF SYSTEM ERROR!!!!!! NOOOOOOOOOOOOOOOO!!!!!! NOBODY CAN KNOW WHO I AM!!!!!! #firsttweet Apr 09, 2017
B8: Everyone in my class, I also just started my new account Apr 09, 2017
B13: I started to use English in Twitter since today. I'm not proud of my ability of English,but I'll do my best. Apr 08, 2017
B16: Hello. I start Twitter in English.
B22: Finally, I have an account on Twitter!! Today is START of spring semester. I can't believe I'm second year univ student omg Apr 07, 2017

Figure 1: Initial Reactions to Twitter Assignment

(NB: A and B students are in different sections with negligible differences in English ability. Although this paper concentrates on results from A class interactions, B class comments are provided here for context.)

*Source: Data collected by Theodore Bonnah 2017*

Comments fall in the following categories of announcing start (students A5, A6, B13, A15, A16, B8, B13, B16, B22), reporting frustration with technical problems (A16, B3, B6), networking (A1), expressing doubt about one's English ability (B13), or uncertainty about procedure (A3), as shown in Figure 1 above.

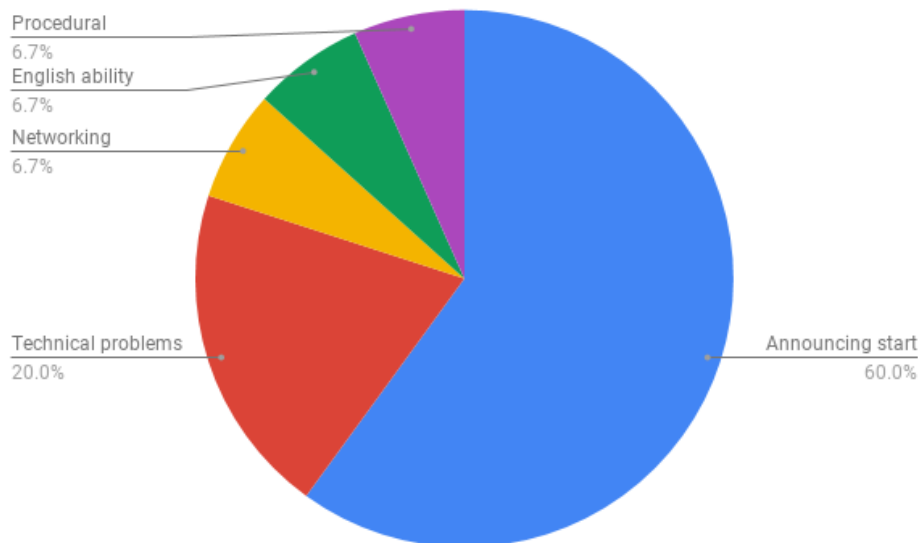


Figure 2: Categories of Announcing Twitter Start  
Source: Adapted from data collected by Theodore Bonnah 2017

In total, twelve of forty-seven (or one in four students) felt the need to comment about starting Twitter, implying their high concern with its use, and made up 60 percent of all responses. The author has never seen students feel the need to announce starting CALL before, which implies their enthusiasm about the program. Similarly, 20 percent of commentators expressed their dismay that technological problems had kept them from starting daily tweeting on time. In my years of CALL experience with programs designed for education, I have never seen students express frustration with starting to use a technology. If students cannot figure out a program, they give up and complain to the teacher. This variety of expressions testifies to usefulness of Twitter as a mode of expression, as well as the positive attitude it engendered.

Conversely, at the end of the semester and the year-long class, students used Twitter to convey their feelings about the experience. For the sake of brevity, I have included a small random selection of such tweets in Figure 3 below:

- A17: I'm happy to meet IE20&50 people , and Ted Thank you so much Jul 12, 2017
- A18: I love Ted and IE50 class. I had a good time. Thank you for Ted and everyone!! Now, I'm so sad... Jul 12, 2017
- A19: I enjoyed IE class! Thank you,Ted I'm sad... Jul 12, 201
- A19 R: At first, I was nervous but I had a lot of fun because Ted and all IE members accepted me! Thank you Jul 13, 2017
- B1: Thanks for the IE class! Jul 12, 2017
- B3: Thanks,TED and IE FRIENDS Jul 12, 2017
- B5: Thanks for IE51 Jul 12, 2017
- B21: I wanna take IE51 class again Jul 12, 2017

Figure 3: End of Semester Messages (Extract)  
Source: Data collected by Theodore Bonnah 2017

Although none of the comments mentions Twitter, consisting instead of positive feedback thanking teacher and peers or expressing enjoyment of the class and sadness at its end, this attests to the cohesion allowed by implementation of the SNS. Also, it demonstrates how Twitter works as a final mode of expression that allows access and the ability to address to the whole class and the teacher, an interaction on a greater level than in traditional classes.

Indeed, there was much more engagement with the teacher via Twitter as opposed to a normal class, as evidenced by the number of tweet impressions (see Figure 4). The analytic data from my Twitter account displayed several traces of interaction. As seen in Figure 4, tweet impressions were off the chart at nearly 40, 000. Tweet impressions are the total number of technically possible views of a tweet; i.e. delivery of a tweet to one's timeline and thus to all followers' timelines and accounts connected to them, and so indicate the creation of the Twitter network between students and teacher. More significantly, the small jump in profile visits also means students are actively entering this network to see the teacher's account.

Tweets, Profile Visits, Tweet Impressions, Mentions and New Followers

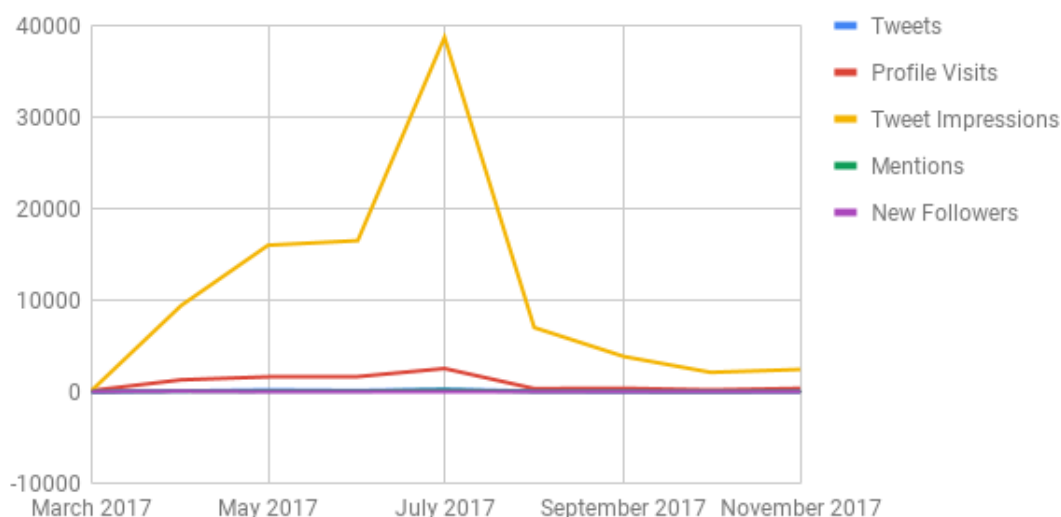


Figure 4: Teacher Analytics

Source: Data collected by Theodore Bonnah, 2017

Next, communication continued outside of class time (e.g. during commutes, on the weekend), whether it be students posts, interactions between students, or with the teacher, as we shall later see in the Conversation Analysis examples below. Since communication usually is limited to class time in a traditional style class, this was both extra exposure, as well as indication that communication in English was becoming a life practice. Additionally, there was markedly improved class completion of assigned homework. Although this is a subjective observation, working in Japanese higher education for a decade, I have found that students have a decided aversion to homework. This aversion shows itself in low completion rates of homework assignments. By using Twitter to disseminate and remind, completion rose to 83.6 percent in class A and 79.5 percent in class B, respectively. Finally, the majority of students far exceeded the minimum requirements of the assignment, namely to tweet five days a week over ten weeks for a total of fifty times. The average number of tweets composed by students was 161, over three times the minimum requirement.

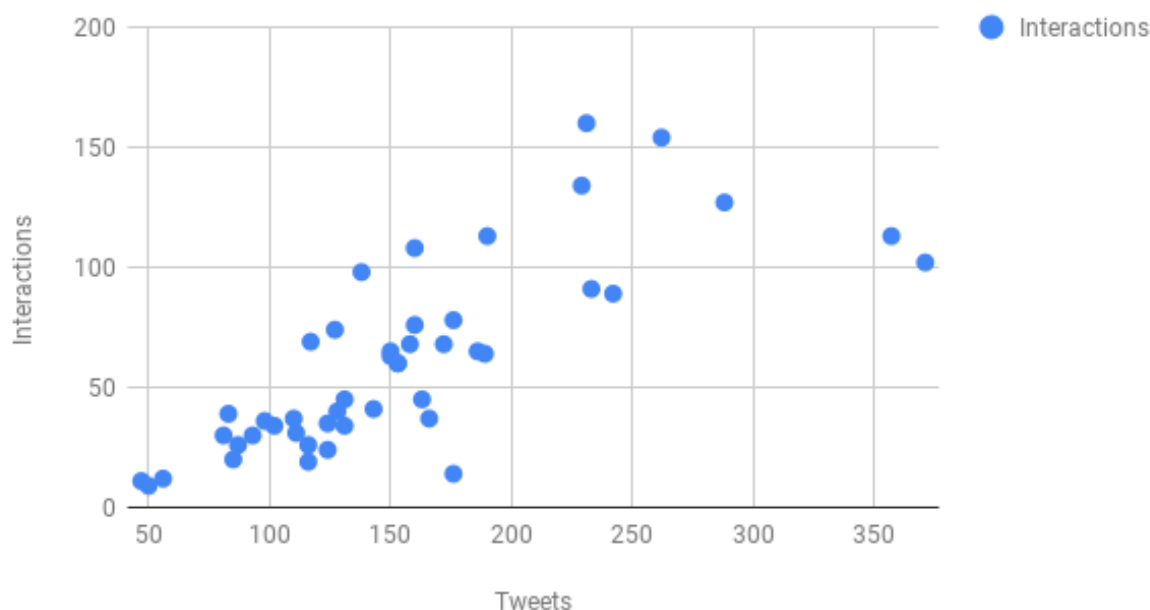
Although these general effects of Twitter would be enough to suggest its implementation, it is its effects on interaction that I now turn to.

### *Quantitative Results—Corpus Analysis*

#### **Interactions, Tweets, and Word Counts**

Next, by correlating interactions and tweets (see Figure 5 below), I could get a sense of how interactive competence was exercised. The correlation of interactions versus tweets was 0.7761946629, indicating a fairly strong correlation, though not causation. This implies that interaction can be exercised and taught. However, more resolution is needed to see fluctuations in this correlation for individuals based on factors such as their personal history and technological prowess.

#### **Interactions vs Tweets**



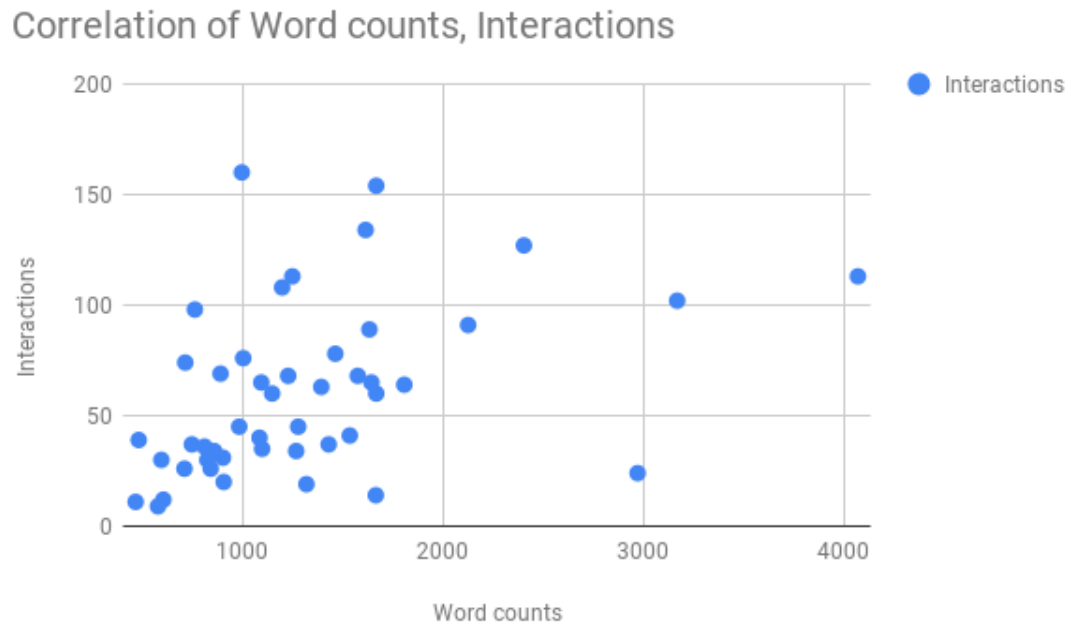


Figure 6: Tweets vs. Word Count

*Source: Adapted from data collected by Theodore Bonnah 2017*

### Network of Interactions

Another benefit of using Twitter was the network of social interactions allowed by the platform. To visualize the social network details, I created a network table using Google's experimental Fusion Tables.<sup>9</sup> The resulting table presented several interesting characteristics of the social network created.

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<sup>9</sup> Information about Fusion Tables is available from <https://support.google.com/fusiontables/answer/2571232?hl=en> Note that Fusion Tables will be turned down on December 3, 2018, but were reliable at the time of creation of the table in May 2018, and that the data used to make the network table is unaffected.

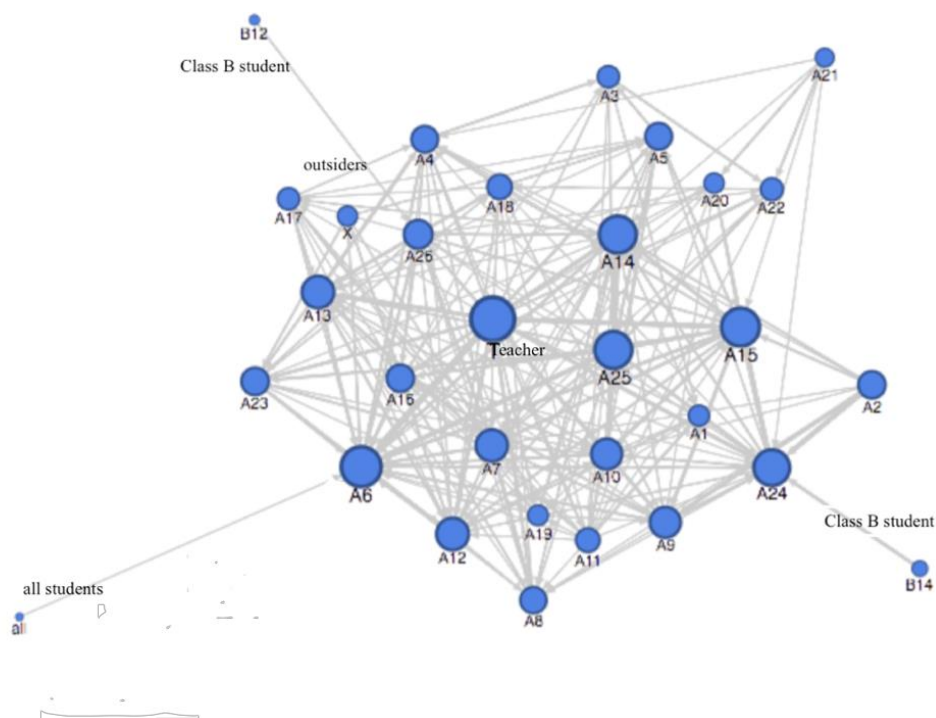


Figure 7: Network Graph of Interactions  
 Source: Adapted from data collected by Theodore Bonnah 2017

Some things are clear from looking at the visual representation of the network created in the class. First, students are interacting consistently with each other to varying degrees, implying that Twitter lets students choose their own level of interaction. Additionally, the teacher is still at the center of the class social network, and so class power relations are maintained to some extent. Interestingly, there were also interactions with different sections of the course (B). As noted, the class of fifty students was split into sections A and B. Although no attempt was made by the teacher to create interaction between these two, from the network table, interactions with two students from section B are visible. This is unsurprising overall as all tweeters are members of the same institution in the same year. What was surprising was the presence of interaction with outsiders (as indicated by X in Figure 7). Although there is no way of knowing how these outsiders were connected to the class, this type of connection is impossible with a traditional class structure. For future studies, stricter recording of interactions and their participants should shed light on these outsider interactions.

### ***Qualitative Findings***

#### **Conversation Analysis of Low- and High-Level Learner Interactions**

In addition to the above quantitative findings, looking at Twitter use qualitatively also hints at its utility in terms of learner interaction and identity. By performing a Conversation Analysis on two extracts from the corpus, one with low-level English L2 learners and another with high, we can see the type of interactions and identity formation that the platform promotes. In both conversations, since the students' personal histories (e.g. English level, interpersonal skills, etc.) have an impact on their ability to participate in or sustain an interaction, I will give a brief overview of their particulars.

In the first conversation (see Figure 8 and 9), Student A11 has low confidence in spoken English and low interpersonal skills, going so far as to consult with the office about quitting the class after the first semester, which focused on speaking and listening. As for student A1, he joined the class in the second semester, and thus is less integrated into its social network, besides



also having low confidence with spoken English. These two low level students interact in a simple fashion, using the greeting template the author taught in class.

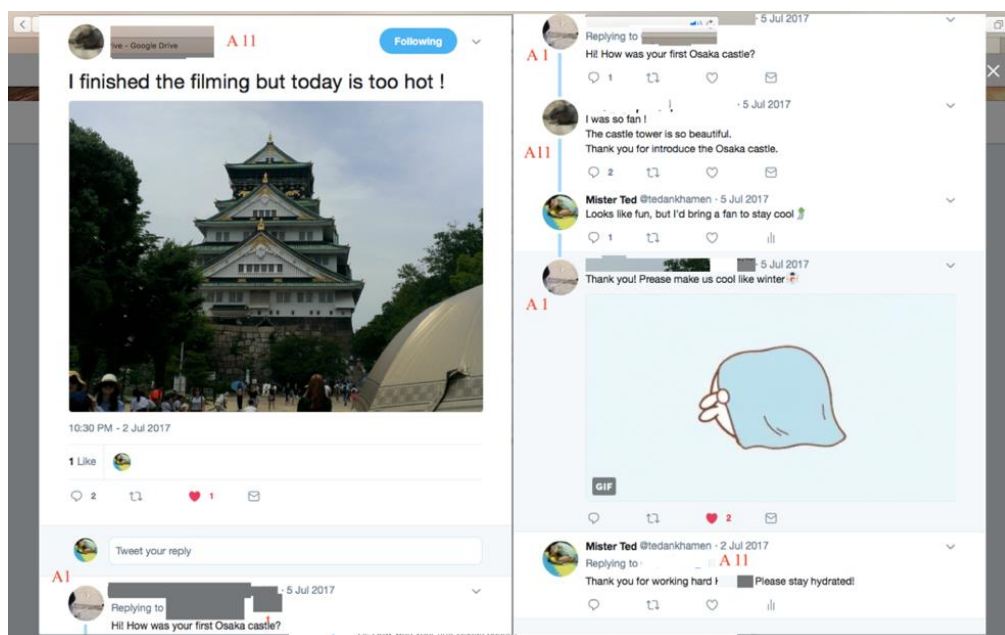


Figure 8: Conversation Extract 1 (Low-Level Interaction)

Source: Theodore Bonnah 2018

A11: [picture] I finished the filming but today is too hot!!

A1: Hi! How was your first Osaka castle?

A11: I was so fan! The castle tower is so beautiful. Thank you for introduce the Osaka castle.

T: Looks like fun, but I'd bring a fan to stay cool.

A1: Thank you! Prease make us cool like winter. [snowman emoji]

T: Thank you for working hard A11. Please stay hydrated!

Figure 9: Conversation 1 Transcript (Low-Level Interaction)

Source: Data collected by Theodore Bonnah 2017

Considering the low English and interpersonal confidence of both students, the apparent ease of conversation attests to the benefits of using the risk-taking space of Twitter for interaction. A11 begins with an observation on a filming assignment. A1 responds with a question, which A11 directly answers. The teacher interjects with a comment that models a correction to a mistake made by A11 (using fan instead of fun), but A1 responds without noticing and adds a non-English semantic construction. The fact that students continued the interaction despite the teacher signaling an error, and that a low-level student would take the risk of making an unsure semantic construction (“Prease make us cool like winter”), and be confident enough to affix an emoji emotion marker, shows how Twitter is useful for encouraging interactive exercise at low levels.

In the second conversation (see Figure 10 and 11), three higher-level students interact in a sophisticated fashion. A12 is a gregarious student, a drama club member with stilted English communication, but with no fear of making mistakes. A24 is by contrast a shy, introverted but bright student who joined the broadcast club of the university in second semester to improve her

interpersonal skills. A16 is a quieter student, but with high English technical proficiency and good interactive ability.

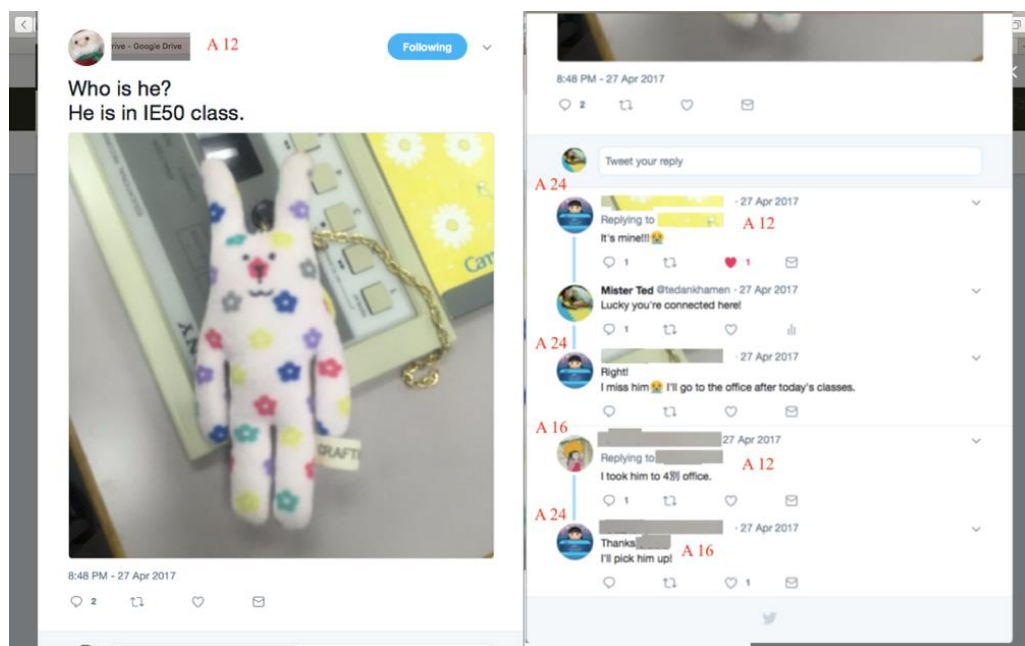


Figure 10: Conversation 2 (High-level Interaction)  
Source: Theodore Bonnah 2018

A12: Who is he? He is in IE 50 class. [picture]

A24: It's mine!!

Teacher: Lucky you're connected here!

A24: Right! I miss him [crying emoji]. I'll go to the office after today's classes.

A16: I took him to A4 別 office.

A24: Thanks A 16. I'll pick him up!

Figure 11: Conversation 2 Transcript (High-Level Interaction)  
Source: Adapted from data collected by Theodore Bonnah 2017

What is most interesting here is that although the students are of mixed abilities (gregarious but error-prone A12, shy A24, and proficient but uncommunicative A16), they interact as equals to fulfill a task. In my experience, L2 students will often resort to L1 for this type of mundane, extracurricular task because it is expedient. For students to perform such an act in L2 means that their learner identity is one that finds task completion doable in either language. Whereas the first conversation references an event in the past and thus is a completely linguistic or lexical affair, the second conversation revolves around resolving a problem (i.e. returning the lost doll). These examples imply Twitter's efficacy in promoting interaction and L2 identity formation for L2 learners of different ability levels and dispositions.

### *Social Justice Pedagogy*

Finally, Twitter offered a platform for teaching social awareness and self-expression in two ways. First, Twitter allowed the instructor to elicit student responses to current affairs in a nonjudgmental and enjoyable way. The teacher ran a “gallery walk” in class, in which he posted various political cartoons on the classroom walls, and had students in groups of three rotate around discussing each photo for three minutes to the accompaniment of music. After the gallery walk, students were told to take a photo of their favorite cartoon and tell what they thought it meant in a post. An example of the most popular cartoon in class A, chosen by 44 percent of students, is given in Figure 12 below.



Figure 12: Political Cartoon Screenshot  
Source: Theodore Bonnah 2018

Initially, the Japanese university students in my classes were loathe to give their opinions on world events and politics, which stems not only from the culturally inscribed reservation about self-expression noted by Doyon (2000), but also partially from their self-professed ignorance of matters outside of Japan. As the above example shows, the student gained both the confidence to express their opinion while referencing a world event, as did the other students in class A and B who chose the same image. Had the instructor wished, he could have extended this lesson easily by assigning research on the Paris Agreement or President Trump. In this case, Twitter truly provided a means and mode of self-expression in L2 that superseded cultural limits on interaction and expression, and confirmed Borau et al.'s (2009) findings of Twitter's usefulness in training both expressive and cultural competence.

## Conclusions and Suggestions

After such a use of technology in the classroom, it is customary to ask if students' English improved. First and foremost, students exhibited a multitude of interactive types. There were interactions with the instructor, with other students, and with non-members (other classes, outside world). Students also engaged in interactions with multiple partners of the above, using both Twitter or simply linguistic addresses. Although harder to measure, the use of Twitter improved interaction face-to-face, made English use a daily practice, and continued interaction both outside of class and beyond the semester.

Although no preliminary baseline test of interaction was done, as the above examples show, interactive competence of students certainly did show improvement beyond what their personal histories suggested, by which I mean visible growth in their ability to interact with different numbers of partners for a variety of purposes, and between different levels of ability. In purely quantitative terms, word counts and number of interactions in L2 were impressive compared to traditional methods. At the least, the implementation of Twitter for interaction was a success as formative learning more so than summative assessment. Additionally, student interaction with the world and self-expression about current affairs via Twitter suggests the possibilities of the platform as a pedagogic tool for social awareness education.

This research is by no means comprehensive, and suggests further directions for Twitter methodology and research in TESOL and other second language education contexts. First, the author feels the need for a more methodological use of #, @, and other functions. This will not only increase the students' multimodal literacy, it should also help with analytics by marking interactions. Next, there is a need for development of New Media English as a teachable subject, involving contractions, emoji, and hypertext. This type of media literacy should be part of an SLA curriculum, as it is becoming a staple of global English communication, both for personal and professional uses. Similarly, a methodology for interactive competence should be articulated from this research. Finally, Twitter-specific issues also need to be addressed. How can we compile and analyze interactions in the set network of a class and beyond? How can we get metadata without compromising ethics? How can we use Twitter without corporate interests? As this research shows, the use of Twitter for Second Language Acquisition teaching and research still has a long way to go.

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